Amendments to the Claims:

This listing of claims will replace all prior listings of claims in the application.

Listing Of Claims:

Claim 1 (currently amended): A method of detecting from a vehicle variations in path on a road having a surface and road edges comprising ~~the steps of~~:

- taking an image of a road scene unfolding in front of the vehicle and at least partly illuminated by the vehicle,

- determining, for each pixel in the image a light decrease gradient,

- ~~analysing~~ analyzing these light decrease gradients and determining an image of the road edges,

- mathematically discriminating the light decrease gradients from the image of the road edges, and

- analyzing this discrimination by comparing the distribution of luminosity and determining an angle of [[the]] a bend of the road.

Claim 2 (currently amended): A method according to Claim 1, wherein the light decrease gradient of an elementary image part corresponds to a decrease vector of light formed between adjacent pixels.

Claim 3 (currently amended): A method according to Claim 2, wherein the analysis of the light decrease gradients comprises a thresholding of the decrease vectors and an elimination of the decrease vectors outside the threshold.

Claim 4 (previously presented): A method according to Claim 2 wherein the mathematical discrimination comprises counting the elementary image parts having a vector oriented in one direction and the elementary image parts have a decrease vector oriented in the opposite direction.

Claim 5 (previously presented): A method according to Claim 4, wherein the counting of the elementary image parts is carried out pixel column by pixel column, or by groups of pixel columns.

Claim 6 (previously presented): A method according to Claim 1, wherein the analysis of the discrimination is carried out by a neural network.

Claim 7 (previously presented): A method according to Claim 6, wherein the neural network has previously learnt geometries of bends and corresponding mathematical discriminations.

Claim 8 (previously presented): A system for detecting a bend in a road from a vehicle implementing the method according to Claim 1, comprising a camera mounted in the vehicle, an image processing unit and a neural network.

Claim 9 (previously presented): A system of detecting a bend according to Claim 8, wherein the neural network is integrated in the image processing unit.

Claim 10 (previously presented): A system for detecting a bend according to Claim 8 that is connected to a vehicle headlight, movable or fixed and modulated for intensity.

Claim 11 (currently amended): A method according to Claim 3 wherein the mathematical discrimination comprises counting the elementary image parts having a vector oriented in one direction and the elementary image parts have a decrease vector oriented in the opposite direction.

Claim 12 (previously presented): A method according to Claim 2, wherein the analysis of the discrimination is carried out by a neural network.

Claim 13 (previously presented): A method according to Claim 3, wherein the analysis of the discrimination is carried out by a neural network.

Claim 14 (previously presented): A method according to Claim 4, wherein the analysis of the discrimination is carried out by a neural network.

Claim 15 (previously presented): A method according to Claim 5, wherein the analysis of the discrimination is carried out by a neural network.

Claim 16 (previously presented): A method according to Claim 1, wherein the neural network has previously learnt geometries of bends and corresponding mathematical discriminations.

Claim 17 (previously presented): A method according to Claim 2, wherein the neural network has previously learnt geometries of bends and corresponding mathematical discriminations.

Claim 18 (previously presented): A method according to Claim 3, wherein the neural network has previously learnt geometries of bends and corresponding mathematical discriminations.

Claim 19 (previously presented): A method according to Claim 4, wherein the neural network has previously learnt geometries of bends and corresponding mathematical discriminations.

Claim 20 (previously presented): A method according to Claim 5, wherein the neural network has previously learnt geometries of bends and corresponding mathematical discriminations.

Claim 21 (previously presented): A system for detecting a bend in a road from a vehicle implementing the method according to Claim 2 comprising a camera mounted in the vehicle, an image processing unit and a neural network.

Claim 22 (previously presented): A system for detecting a bend in a road from a vehicle implementing the method according to Claim 3 comprising a camera mounted in the vehicle, an image processing unit and a neural network.

Claim 23 (previously presented): A system for detecting a bend in a road from a vehicle implementing the method according to Claim 4 comprising a camera mounted in the vehicle, an image processing unit and a neural network.

Claim 24 (previously presented): A system for detecting a bend in a road from a vehicle implementing the method according to Claim 5 comprising a camera mounted in the vehicle, an image processing unit and a neural network.

Claim 25 (previously presented): A system for detecting a bend in a road from a vehicle implementing the method according to Claim 6 comprising a camera mounted in the vehicle, an image processing unit and a neural network.

Claim 26 (previously presented): A system for detecting a bend in a road from a vehicle implementing the method according to Claim 7 comprising a camera mounted in the vehicle, an image processing unit and a neural network.

Claim 27 (previously presented): A system for detecting a bend according to Claim 9 that is connected to a vehicle headlight, movable or fixed and modulated for intensity.

Claim 28 (new): A method according to Claim 1, further comprising controlling lateral orientation of at least one vehicle headlight based on the determination of the angle of the road.

Claim 29 (new): A method according to Claim 1, wherein the step of mathematically discriminating comprises generating a first curve corresponding to the number of pixels having a decrease vector oriented from the left of the image towards the center of the image, and generating a second curve corresponding to the number of pixels having a decrease vector oriented from the left of the image towards the center of the image.

Claim 30 (new): A method according to Claim 29, wherein the step of analyzing the discrimination comprises deducing the shape of the road ahead based on the form of the first and second curves.